Nov. 11, 1930. A. ROSENBERG 1,781,196

KNITTED CAP AND PROCESS OF MAKING SAME

Filed Feb. 13, 1930

FIG. 2.



FIG. 3.

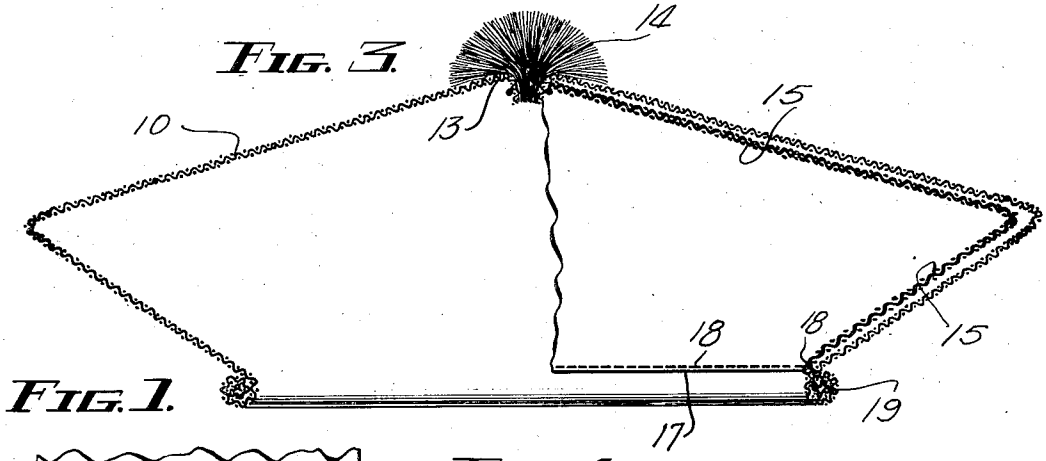


FIG. 1.

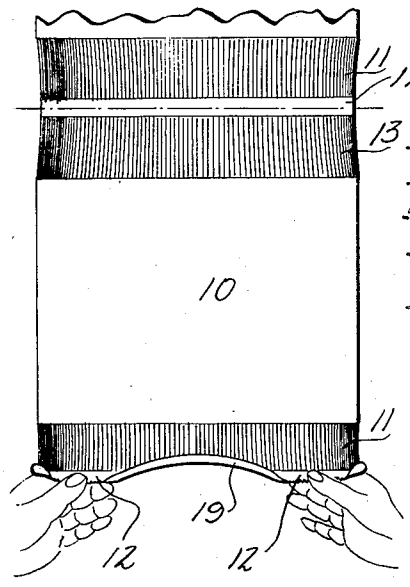
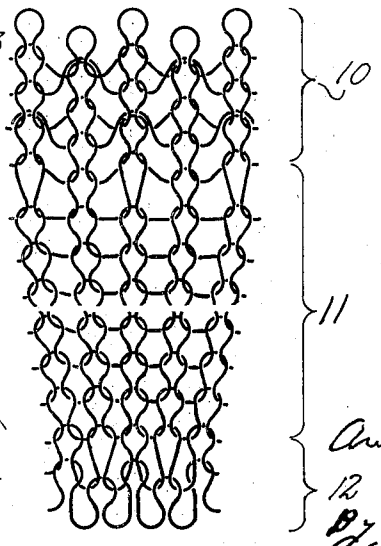


FIG. 4.



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UNITED STATES PATENT OFFICE

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KNITTED CAP AND PROCESS OF MAKING SAME

Application filed February 13, 1930. Serial No. 428,025.

My invention relates to improvements in knitted caps and processes of making the same.

The primary object of the invention is to avoid the necessity of finishing the lower margin of the cap knitted on a circular knitting machine.

More particularly stated, my object is to develop additional tension in the threads during the knitting operation as the cutting line is approached, whereby to cause the knitted material in the zone of increased tension to automatically roll up as soon as the tube is severed, thus providing a highly resilient cylindrical roll which forms a finished roll margin of the completed cap which wholly conceals the cut edge and embraces the head of the wearer under light resilient pressure sufficient to retain the cap in place.

In the drawings:

Figure 1 is a view on a reduced scale of the knitted blank or tube section from which my improved cap is to be formed.

Figure 2 is a view of the cap as it appears upon the head of the wearer.

Figure 3 is an enlarged view in vertical section, showing the completed cap with the rolled lower margin.

Figure 4 is a greatly enlarged fragment illustrating the relation of the threads in the body of the cap to those in the zone of increased tension, and illustrating a difference in the style of knitting in the different zones.

My improved cap may be knitted upon a tubular knitting machine and the tube may be continuously knitted and cut into sections of the required length for the formation of the caps in accordance with standard practice, except as hereinafter described.

The major portion of the section comprises the tuck stitched portion indicated at 10 in Figure 1, which may be conveniently termed the major zone of the section. Upon reaching the end of this zone the threads are placed under increased tension, thereby forming a more closely knitted zone 11. While knitting the zone 11 the tension of the threads may be progressively increased, thereby causing a gradually increasing convergence of the wales. This zone is preferably made about one and one-half inches long, (wide), whereupon the tension is released and knitting resumed of the character indicated in the zone 10 to form a severance zone 12.

A different type of stitch is preferably employed when knitting the zone 11 from that employed for knitting the zone 10. For example, the zone 10 may be knitted in what may be called a miniature tuck shaker stitch and the zone 11 may be plain stitched. By plain stitching the zone 11, the desired tension and rolling tendency and also the desired compactness of the roll may be more easily attained. The zone 12 is preferably made only a few courses wide to indicate the line of severance and another zone 13 is then plain stitched. This zone 13 forms the top of the cap to be made from the next section.

When a section such as is shown in Figure 1 is severed substantially at the center of the zone 12, the severed portion of the zone 12 and also the material composing the zone 11 will automatically wind up in the direction of the zone 10 in a compact roll composed of several turns or layers of fabric, thereby completely enclosing the cut margin in a ring which is cylindrical in cross section and of considerable resistance to unwinding pressures or stresses.

The cut margins of knitted tubular fabrics usually show some winding tendency, but by having, along such margin, a zone in which the thread is under increased tension the degree and compactness of the winding can be controlled and a sufficiently solid highly resilient ring may be produced to constitute a finishing band for the lower margin of the cap. The width of the tension zone 11, the character of the stitch, and the tension of the

thread are all factors in determining the size and character of this cylindrical band.

After severing a tube section, the upper end, (zone 13), is gathered, stitched together, and covered by an ornamental top piece, such as the pom-pom 14, in accordance with the usual practice. But this gathering of the top of the section and the application of the pom-pom or other top piece constitutes the only finishing work required to complete the cap in a condition for pressing it into the desired shape, as indicated in Figure 3.

The rolled portion 11 not only forms a finished margin for the lower portion of the cap but it provides a soft, highly elastic head gripping band of a pleasing appearance.

My improved cap may be provided with a lining 15, a fragment of which is illustrated at the right hand side in Figure 3. This lining may be secured at the top or it may constitute an inturned integrally knitted portion, and its lower margin 17 may be stitched to the body of the cap at 18, substantially at the junction between the body and the cylindrical roll 19. A lining so connected at 18 will not interfere with the above described winding action in the zone of increased tension.

I claim:

1. The process of forming knitted caps, consisting in knitting a tube in sections, each of sufficient length to form a cap, placing the threads under increased tension near the lower end of each section, knitting a few courses under reduced tension, severing the tube transversely and allowing the lower portion of the section to roll up cylindrically, and then gathering and stitching the other end of the section to form the top of the cap.

2. The process of forming knitted cap blanks consisting in knitting a tuck stitched tube, placing the thread under increased tension and knitting a plain stitched extension, severing the thread and allowing the extension to roll up in the form of a band cylindrical in cross section.

3. A tubular knitted cap having a lower margin cylindrically rolled and held in rolled form by tension of its thread, said thread having relatively greater tension than in the body of the cap.

4. A tubular knitted cap having a cylindrically rolled zone of relatively increased thread tension along its lower margin, said margin having a severance edge concealed at the center of said cylindrical roll.

5. A tubular knitted cap having a cylindrically rolled zone of relatively increased thread tension along its lower margin, said margin having an edge along which the threads are severed and concealed at the center of said cylindrical roll, together with a lining applied to the body of the cap and secured thereto substantially at the junction between the body and the said cylindrically rolled portion.

6. A knitted cap having at its lower margin an integral, compact, cylindrical roll of knitted material concealing an unfinished edge and held in rolled condition by thread tension.

7. A knitted cap having at its lower margin an integral, compact, cylindrical roll of knitted material concealing an unfinished edge and held in rolled condition by thread tension, said cap having a shaker body portion and plain stitched rolled portion.

ARMIN ROSENBERG.